



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,117	07/22/2003	Sebastien Weitbruch	PD020073	9417

24498 7590 12/18/2006  
THOMSON LICENSING INC.  
PATENT OPERATIONS  
PO BOX 5312  
PRINCETON, NJ 08543-5312

EXAMINER
----------

OSORIO, RICARDO

ART UNIT	PAPER NUMBER
----------	--------------

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/625,117

**Applicant(s)**

WEITBRUCH ET AL.

**Examiner**

RICARDO L. OSORIO

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9 and 11-18 is/are rejected.
- 7) ☒ Claim(s) 8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/22/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 7, 11-13, 15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kang (6,791,516).

Regarding claims 1 and 11, Kang teaches of an apparatus for driving a display device having a plurality of luminous elements with addressing means for addressing at least one of said luminous elements for one complete frame period or a part of it called activation cycle, by applying an addressing impulse having a predetermined writing voltage to each of said luminous elements (col. 1, lines 22-41), and controlling means connected to said addressing means for controlling the light output of each of said luminous elements to be addressed by applying at least one sustain impulse having a predetermined sustain voltage (col. 7, lines 1-12), characterized in that the light output of at least one of said luminous elements to be addressed is controllable by said controlling means also on the basis of the energy of said addressing impulse from said addressing means ( see claim 15).

Art Unit: 2629

Regarding claims 2 and 12, Kang teaches of at least one of said luminous elements to be addressed being activatable in said one frame period by only said addressing impulse (col. 5, lines 65-67, and col. 10, lines 39-41).

As to claims 3 and 13, Kang teaches of at least one of said addressed luminous elements being activatable in said one frame period by said addressing impulse (Fig. 7, ch. SCN) and at least one sustain impulse (Fig. 7, ch. SUS).

As to claims 5 and 15, Kang teaches of the light output of each of said addressed luminous elements being controllable by said controlling means for one frame period by a plurality of activation cycles (Fig. 7, chs. SF1-SF3) and an erasing operation at the end of each activation cycle (see Fig. 7 ch. ERASE).

As to claims 7 and 17, Kang teaches of analyzing means for analyzing a picture to be displayed, said analyzing means being connected to said controlling means (Fig. 5, APL (4) is both controlling means and analyzing means) so that the light output is controllable on the basis of the picture analysis (col. 7, lines 1-12).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6, 14, and 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang (6,791,516) in view of Kanazawa (5,446,344).

Art Unit: 2629

Regarding claims 4, 6, 14, and 16, Kang, further, teaches of said addressing operation being performed at the beginning of the activation cycle followed by a sustain impulse (see Figs. 6 and 7).

However, Kang does not specifically teach of the activation energy of said addressing impulse is lower than that of one sustain impulse and that the sustain pulse is optional.

Kanazawa teaches of the activation energy of said addressing impulse is lower than that of one sustain impulse and that the sustain pulse is optional (col. 20, lines 11-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the activation energy of the addressing impulse, as taught by Kanazawa, in the device of Kang, to remove the excessive negative wall charges on the address electrode to prevent display errors and improve the display quality of the PDP (col. 20, lines 11-31).

5. Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang (6,791,516) in view of Kang et al. (US 2001/0011973).

Regarding claims 9 and 18, Kang does not specifically teach that controlling means includes threshold means so that the light output of each of said luminous elements to be addressed is controllable on the basis of the energy of the corresponding addressing impulse if the brightness of a frame analyzed by said analyzing means (Fig. 8, ch. 81) is lower than a predetermined threshold.

Kang et al. teaches of controlling means (Fig. 8, ch. 82) including threshold means so that the light output of each of said luminous elements to be addressed is controllable on the basis of the

Art Unit: 2629

energy of the corresponding addressing impulse if the brightness of a frame analyzed by said analyzing means (Fig. 8, ch. 81) is lower than a predetermined threshold (paragraphs 41 and 42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the threshold means, or level analyzing means, as taught by Kang et al., in the device of Kang to prevent the discharging capability from decreasing even with a prolonged time for display a low-brightness image on the plasma display panel (see paragraph 19).

***Allowable Subject Matter***

6. Claims 8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 571-272-7676. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 571-272-7681.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

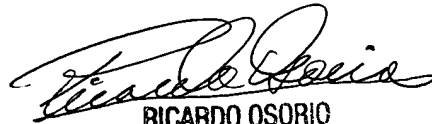
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Application/Control Number: 10/625,117

Page 6

Art Unit: 2629

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ricardo Osorio', is positioned above the printed name and title.

RICARDO OSORIO  
PRIMARY EXAMINER

Technology Division: 2629

RLO

December 10, 2006